



CLAIM.

2. Device converting thermal energy into kinetic energy, related to the group of thermodynamic machines using adiabatic compressors, adiabatic expanders and heat exchangers that convert thermal energy into kinetic one by means of an available outside heat source, said device being more
5 specifically related to devices using rarefied gas in a three-phase cycle in which the first phase is an adiabatic expansion accomplished by an expander, the second phase is an isobaric expansion accomplished by a heat exchanger, both said expander and heat exchanger being located correspondingly in two adjacent rooms of a vessel and having between them a membrane with
10 numerous pores, accomplishing the third phase, which is a spontaneous isothermal gas aggregation equivalent to ideal isothermal compression,

characterized by

15 the fact that in place of the membrane stands a region Fig.5, No 4, located, according to the gas flow direction, between a heat exchanger Fig. 5, No 6, and an expander Fig. 5, No. 5, like the above mentioned, all put in a vacuum glass vessel as shown in Fig. 5, said region Fig. 5, No 4, containing numerous slots Fig .2, No 26, which have

20

(a) Diverging active inner surfaces Fig. 9(b), perfectly polished, as indicated in p. 2, line 30 of the description, with the angle ω , Fig. 2, between them optimized for maximum output power.

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(b) Microscopic cross section comparable to the mean free path of the molecules.

and (c) A macroscopic length of 20mm, as in No 30, Fig. 2,

30

said slots being grouped together as spacings s , Fig. 9 between adjacent parallel triangular rods Fig. 9, No 19 and arranged first, with a number of them, in series to form small modules, Fig. 6, No 15, in order to achieve increased pressure difference between input and output of each module, said modules being then grouped together in a parallel layout, Fig.7, in respect to the gas flow, as shown by the arrows Fig. 7, No 31.

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